

King Fahd University of Petroleum and Minerals  
Department of Mathematics and Statistics  
Math-201 Semester-152 QUIZ III

NAME:

S.No.

ID:

Maximum Marks: 10

Section:

Time Allowed: 40 minutes

- (1) Find the distance from the plane  $x + 2y + 3z = 3$  to the plane  $3x + 6y + 9z = 30$ .  
(2) Identify and sketch the quadratic surface

$$x^2 - y^2 + z^2 - 4x - 2y - 2z + 4 = 0.$$

- (3) Find the equation of a plane through the point  $(-1, 2, 1)$  and contains the line of intersection of the planes  $x + y - z = 2$  and  $2x - y + 3z = 1$ .